

SEQUENCE LISTING

<110> LICHA, KAI
 BECKER, ANDREAS
 SEMMLER, WOLFHARD
 WEIDENMANN, BERTRAM
 HESSNIUS, CARTSEN
 VOLKMER-ENGERT, RUDOLF
 SCHNEIDER-MERGENER, JENS
 BHARGAVA, SARAH

<120> SHORT-CHAIN PEPTIDE-DYE CONJUGATES AS CONTRAST MEDIA
 FOR OPTICAL DIAGNOSIS

<130> SCH-1731

<140> 09/528,200

<141> 2000-03-17

<150> DE 199 17 713.9

<151> 1999-09-04

<160> 196

<170> PatentIn Ver. 2.1

<210> 1

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic
 peptide

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His Trp Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

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<223> Description of Artificial Sequence: Synthetic
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His Ser Asp Ala Val Phe Thr Phe Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 3
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 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

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Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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 peptide

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 His Ser Asp Ala Val Phe Thr Arg Asn Tyr Thr Arg Leu Arg Lys Gln
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Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 6

His Ser Asp Ala Val Phe Thr Trp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 7

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Arg Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 8

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Met Arg Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 9

<211> 14

<212> PRT

<213> Homo sapiens

<400> 9

Ala Gly Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
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<211> 13

<212> PRT
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<400> 10
 Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Tyr Ile Leu
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<400> 11
 Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu
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<210> 12
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 1 5 10 15

<210> 13
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 Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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peptide

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Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
1 5 10

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Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu
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<210> 24

<211> 10

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<400> 24

Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu
1 5 10

<210> 25

<211> 15

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

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Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
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<210> 26

<211> 14

<212> PRT

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 26

Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
1 5 10

<210> 27

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 27

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
1 5 10

<210> 28

<211> 12

<212> PRT

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 28

Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
1 5 10

<210> 29

<211> 11

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 29

Gln Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
1 5 10

<210> 30

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 30

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile
1 5 10

<210> 31

<211> 9

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 31

Ala Val Lys Lys Tyr Leu Asn Ser Ile
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<210> 32

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<212> PRT

<213> Homo sapiens

<400> 32

Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser
1 5 10

<210> 33

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<212> PRT

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<400> 33

Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser
1 5 10

<210> 34

<211> 12

<212> PRT

<213> Homo sapiens

<400> 34

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser
1 5 10

<210> 35

<211> 11

<212> PRT

<213> Homo sapiens

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 Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Ser
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<210> 36
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<400> 36
 Gln Met Ala Val Lys Lys Tyr Leu Asn Ser
 1 5 10

<210> 37
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<400> 37
 Met Ala Val Lys Lys Tyr Leu Asn Ser
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<210> 38
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<400> 38
 Ala Val Lys Lys Tyr Leu Asn Ser
 1 5

<210> 39
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 Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
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 Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
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<213> Homo sapiens

<400> 41

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
1 5 10

<210> 42

<211> 10

<212> PRT

<213> Homo sapiens

<400> 42

Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
1 5 10

<210> 43

<211> 9

<212> PRT

<213> Homo sapiens

<400> 43

Gln Met Ala Val Lys Lys Tyr Leu Asn
1 5

<210> 44

<211> 8

<212> PRT

<213> Homo sapiens

<400> 44

Met Ala Val Lys Lys Tyr Leu Asn
1 5

<210> 45

<211> 7

<212> PRT

<213> Homo sapiens

<400> 45

Ala Val Lys Lys Tyr Leu Asn
1 5

<210> 46

<211> 12

<212> PRT

<213> Homo sapiens

<400> 46

Arg Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu
1 5 10

<210> 47
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 <213> Homo sapiens

<400> 47
 Leu Arg Lys Gln Met Ala Val Lys Lys Tyr Leu
 1 5 10

<210> 48
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 <212> PRT
 <213> Homo sapiens

<400> 48
 Arg Lys Gln Met Ala Val Lys Lys Tyr Leu
 1 5 10

<210> 49
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<400> 49
 Lys Gln Met Ala Val Lys Lys Tyr Leu
 1 5

<210> 50
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<400> 50
 Gln Met Ala Val Lys Lys Tyr Leu
 1 5

<210> 51
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<400> 51
 Met Ala Val Lys Lys Tyr Leu
 1 5

<210> 52
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 <213> Homo sapiens

<400> 52
 Ala Val Lys Lys Tyr Leu
 1 5

<210> 53
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 53

Phe Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 54
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 54

Ile Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 55
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 55

Leu Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 56
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<400> 56

His	Phe	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
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Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 57

His	His	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 58

<211> 28

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 58

His	Ile	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 59

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 59

His	Leu	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 60
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 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 60
 His Met Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 61
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 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 61
 His Gln Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 62
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 <223> Description of Artificial Sequence: Synthetic
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<400> 62
 His Thr Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 63
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<223> Description of Artificial Sequence: Synthetic peptide

<400> 63

His Val Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 64

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 64

His Trp Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 65

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 65

His Tyr Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 66

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 66

His Ser Ala Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 67

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 67

His Ser Glu Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 68

<211> 28

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 68

His Ser Phe Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 69

<211> 28

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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 69

His Ser His Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 70
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<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 70
 His Ser Ile Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 71
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<400> 71
 His Ser Leu Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 72
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<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 72
 His Ser Met Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 73
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<400> 73

His	Ser	Trp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 74

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<400> 74

His	Ser	Asp	Phe	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 75

<211> 28

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 75

His	Ser	Asp	Gly	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 76

<211> 28

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 76

His	Ser	Asp	Met	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 77
 <211> 28
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 <213> Artificial Sequence

<220>
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<400> 77
 His Ser Asp Gln Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 78
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<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 78
 His Ser Asp Ser Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 79
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 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 79
 His Ser Asp Trp Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 80
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<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 80

His Ser Asp Tyr Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 81

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 81

His Ser Asp Ala Phe Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 82

<211> 28

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 82

His Ser Asp Ala Ile Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 83

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 83

His Ser Asp Ala Leu Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 84

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 84

His Ser Asp Ala Met Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 85

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 85

His Ser Asp Ala Thr Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 86.

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 86

His Ser Asp Ala Trp Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 87
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 <223> Description of Artificial Sequence: Synthetic
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<400> 87
 His Ser Asp Ala Tyr Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 88
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<220>
 <223> Description of Artificial Sequence: Synthetic
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<400> 88
 His Ser Asp Ala Val Lys Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 89
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<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 89
 His Ser Asp Ala Val Phe Val Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
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<210> 90
 <211> 28
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<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 90

His	Ser	Asp	Ala	Val	Phe	Trp	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 91

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 91

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Trp	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 92

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 92

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Arg	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 93

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 93

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Trp	Arg	Lys	Gln
1				5					10					15	

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 94
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 94
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Phe Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 95
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 95
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Leu Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 96
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 96
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Met Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 97
 <211> 28

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 97
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Arg Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 98
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 98
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Ala
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 99
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 99
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Phe
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 100
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 100

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Ile
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 101

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 101

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Lys
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 102

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 102

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Leu
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 103

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 103

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Met
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 104
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 104
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Arg
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 105
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 105
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Val
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 106
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 106
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Trp
 1 5 10 15
 Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 107
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 107

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Tyr
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 108

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 108

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Phe	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 109

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 109

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Ile	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 110

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 110

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Lys Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 111
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 111
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Leu Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 112
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 112
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Gln Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 113
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 113
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Arg Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 114
 <211> 28

<212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 114
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Trp Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 115
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 115
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Phe Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 116
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 116
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ile Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 117
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 117

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Lys Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 118

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 118

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Leu Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 119

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 119

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Met Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 120

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 120

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Gln Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 121
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 121
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Arg Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 122
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 122
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Val Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 123
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 123
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15
 Met Trp Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 124
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 124

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Tyr	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 125

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 125

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Ala	Ala	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 126

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 126

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met	Ala	Ile	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20				25				

<210> 127

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 127

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5				10						15	

Met Ala Leu Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 128
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 128
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Arg Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 129
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 129
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Arg Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 130
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 130
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Trp Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 131
 <211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 131

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Phe Leu Asn Ser Ile Leu Asn
20 25

<210> 132

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 132

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Trp Leu Asn Ser Ile Leu Asn
20 25

<210> 133

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 133

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ala Ser Ile Leu Asn
20 25

<210> 134

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 134

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Phe Ser Ile Leu Asn
 20 25

<210> 135

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 135

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ile Ser Ile Leu Asn
 20 25

<210> 136

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 136

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Met Ser Ile Leu Asn
 20 25

<210> 137

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 137

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Ser Ser Ile Leu Asn
 20 25

<210> 138
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 138
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Val Ser Ile Leu Asn
 20 25

<210> 139
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 139
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Trp Ser Ile Leu Asn
 20 25

<210> 140
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 140
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Asn Ile Leu Asn
 20 25

<210> 141
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 141

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Arg	Ile	Leu	Asn
			20				25				

<210> 142

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 142

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Trp	Ile	Leu	Asn
			20				25				

<210> 143

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 143

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Tyr	Ile	Leu	Asn
			20				25				

<210> 144

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 144

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met Ala Val Lys Lys Tyr Leu Asn Ser Leu Leu Asn
 20 25

<210> 145
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 145
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ser Leu Asn
 20 25

<210> 146
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 146
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Trp Leu Asn
 20 25

<210> 147
 <211> 28
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic
 peptide

<400> 147
 His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Tyr Leu Asn
 20 25

<210> 148
 <211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 148

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Phe	Asn
		20					25				

<210> 149

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 149

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Ile	Asn
		20					25				

<210> 150

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 150

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Trp	Asn
		20					25				

<210> 151

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 151

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Trp
 20 25

<210> 152

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (8)..(9)

<223> any amino acid

<220>

<221> MOD_RES

<222> (11)

<223> any amino acid

<400> 152

His Ser Asp Ala Val Phe Thr Xaa Xaa Tyr Xaa Arg Leu Arg Lys Gln
 1 5 10 15

Met Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
 20 25

<210> 153

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<220>

<221> MOD_RES

<222> (1)

<223> can represent an amino acid or amino acid derivative that are not natural

<220>

<221> MOD_RES

<222> (6)

<223> can represent an amino acid or amino acid derivatives that are not natural

<220>

<221> MOD_RES

<222> (10)

<223> can represent an amino acid or amino acid derivatives that are not natural

<220>

<221> MOD_RES

<222> (22)

<223> can represent an amino acid or amino acid derivatives that are not natural

<400> 153

Xaa Ser Asp Ala Val Xaa Thr Asp Asn Xaa Thr Arg Leu Arg Lys Gln
1 5 10 15

Met Ala Val Lys Lys Xaa Leu Asn Ser Ile Leu Asn
20 25

<210> 154

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 154

Cys Lys Asn Phe Phe Trp Lys Thr Phe Thr Ser Cys
1 5 10

<210> 155

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 155

Phe Phe Tyr Trp Lys Val Phe Thr
1 5

<210> 156

<211> 8

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 156

Phe Cys Phe Trp Lys Val Cys Thr
1 5

<210> 157
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 157
 Phe Cys Tyr Trp Lys Val Cys Thr
 1 5

<210> 158
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 158
 Phe Cys Phe Trp Lys Thr Cys Thr
 1 5

<210> 159
 <211> 8
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<400> 159
 Phe Cys Tyr Trp Lys Thr Cys Thr
 1 5

<210> 160
 <211> 7
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Synthetic peptide

<220>
 <221> MOD_RES
 <222> (6)
 <223> Abu

<400> 160

Phe Cys Tyr Trp Lys Xaa Cys
1 5

<210> 161

<211> 13

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
peptide

<220>

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<210> 162

<211> 13

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<213> Artificial Sequence

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peptide

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Glu Leu Tyr Gln Asn Lys Pro Arg Arg Pro Tyr Ile Leu
1 5 10

<210> 163

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peptide

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Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Phe Ile Leu
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Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Phe Ile Leu
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Glu Leu Tyr Gln Asn Lys Pro Arg Arg Pro Phe Ile Leu
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Glu Leu Tyr Gln Asn Lys Pro Arg Arg Pro Phe Ile Leu
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Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Trp Ile Leu
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Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Trp Ile Leu
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Glu Leu Tyr Gln Asn Lys Pro Arg Arg Pro Trp Ile Leu
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<400> 170

Glu Leu Tyr Gln Asn Lys Pro Arg Arg Pro Trp Ile Leu
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<210> 171

<211> 12

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<400> 171

Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Tyr Ile
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<210> 172

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<400> 172

Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro Tyr
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<210> 173

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<400> 173

Glu Leu Tyr Glu Asn Lys Pro Arg Arg Pro
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<210> 174

<211> 9

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<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 174

Glu Leu Tyr Glu Asn Lys Pro Arg Arg
1 5

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<211> 8

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<400> 175

Glu Leu Tyr Glu Asn Lys Pro Arg
1 5

<210> 176

<211> 7

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 Glu Leu Tyr Glu Asn Lys Pro
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<400> 177
 Asn Lys Pro Arg Arg Pro Tyr Ile Leu
 1 5

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 1 5

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 Pro Arg Arg Pro Tyr Ile Leu
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<210> 184

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Arg Arg Pro Phe Ile Leu
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<223> Description of Artificial Sequence: Synthetic peptide

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Asn Lys Pro Arg Arg Pro Trp Ile Leu
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<400> 186

Lys Pro Arg Arg Pro Trp Ile Leu
1 5

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<400> 187

Pro Arg Arg Pro Trp Ile Leu
1 5

<210> 188

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 188

Arg Arg Pro Trp Ile Leu
1 5

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<211> 28

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<222> (17)

<223> Indotricarbocyanine Cys

<400> 189

His Ser Asp Ala Val Phe Thr Asp Asn Tyr Thr Arg Leu Arg Lys Gln
1 5 10 15Cys Ala Val Lys Lys Tyr Leu Asn Ser Ile Leu Asn
20 25

<210> 190

<211> 11

<212> PRT

<213> Homo sapiens

<400> 190

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
1 5 10

<210> 191

<211> 12

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 191

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn Lys
1 5 10

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<211> 11

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: Synthetic peptide

<400> 192

Arg Lys Gln Met Ala Val Lys Lys Tyr Leu Asn
1 5 10

<210> 193

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 193

Asn Leu Tyr Lys Lys Val Ala Met Gln Lys Arg
1 5 10

<210> 194

<211> 10

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 194

Asn Lys Pro Arg Arg Pro Tyr Ile Leu Cys
1 5 10

<210> 195

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic peptide

<400> 195

Cys Tyr Trp Lys Val Cys
1 5

<210> 196

<211> 28

<212> PRT

<213> Homo sapiens

<400> 196

His	Ser	Asp	Ala	Val	Phe	Thr	Asp	Asn	Tyr	Thr	Arg	Leu	Arg	Lys	Gln
1				5					10					15	

Met	Ala	Val	Lys	Lys	Tyr	Leu	Asn	Ser	Ile	Leu	Asn
			20					25			